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## THE GOD "D" IN THE CODEX CORTESIANUS \*

BY J. WALTER FEWKES

In his most valuable contribution to the study of Mayan codices Dr. Schellhas ('86, *passim*†) has suggested a nomenclature for their pictures of gods most advantageous in the study of their symbolism and worthy the recognition given it by the foremost students of Mayan pictography. He proposed to designate the figures of deities in these aboriginal "books" by the letters A, B, C, D, etc. Following that nomenclature, the pictographs considered in this article are those referred to D, taken from that fragment of the Codex Tro-Cortesianus called the Cortez codex. The resemblance of D to B and G has led me to discuss all three together, although G does not occur in Codex Cortesianus, as I regard them all related gods. I shall preface what I have to say of D with a brief reference to B, which I have already considered elsewhere ('94).

### *B—Long-nose God.*

This god, identified by Schellhas as Kukulcan, by Brinton as Itzamná, has snake and rain attributes, as already pointed out, and is associated with symbols of all four cardinal points. It is a beneficent deity, and is never represented as hostile or as a captive. He frequently occurs engaged in planting, and in some instances bears one or more torches, suggesting a god of light, as the sun. The symbolism of his mask or ceremonial helmet I have already pointed out, and need not be repeated. As, however, one of the marked peculiarities of B in Cod. Cort., which

\* In justice to the author, the editors desire to say that owing to his absence in Arizona it was not possible for Dr. Fewkes to read the proofs of this paper.

† See bibliographic references at the end of this paper.

was there emphasized, appears to have been overlooked in a subsequent publication of a recent writer, I will again refer to this character. "The god B," says Brinton ('95, p. 51), "is associated with the signs of the east, and his especial and invariable (*sic*) characteristic are two long, serpent-like teeth, which project from his mouth, one in front, the other \* to the side and backward." As I have elsewhere ('94, p. 263) shown in my criticism of Schellhas' diagnosis of B, the so-called portion of the tongue ("serpent-like tooth," (?) Brinton), in front † of the mouth is not an invariable characteristic of B, but is always (in the shape referred to) absent in Cod. Cort., and, I will now add, in Cod. Tro. as well. In Cod. Dres. it is likewise often wanting. Although I find it somewhat difficult to *prove* from Cod. Tro-Cort. alone that B is a sun god, the symbolism and association of figures of him in Cod. Dres. lean, no doubt, on this point.

As I have already ('94, p. 272) pointed out, the features which distinguish the god D from B in Cod. Cort. are the absence of the teeth in the upper jaw and the want of a backward curving oral object or appendage of the mouth. The remainder of the mask or ceremonial helmet, ‡ with unimportant variations which are not constant, is similar in the figures of the gods B and D.

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\* The homology of this object, identified as part of the tongue by Schellhas and called tooth by Brinton, is doubtful. It occurs in figures of certain animals, serpents, and quadrupeds, where its homology with a tooth is doubtful.

† Brinton is also mistaken in ascribing the second figure of his fig. 14 ('95, p. 53) to the Dresden codex. He evidently copied this from an erroneous one by Schellhas ('86, taf. III, fig. 7), which was rightly referred to Cod. Cort., p. xi b, by the latter author. As I have elsewhere ('94, p. 263) shown, this copy is erroneously drawn, for the "part of the tongue" (Schellhas), "tooth" (Brinton), in front of the mouth has been modified as compared with the original, which it little resembles. Brinton's fig. 12 ('95, p. 52) of B has the union of the lateral "tooth" with the upper jaw inaccurately copied. This faulty figure is a copy of B from Cod. Tro. xxvii, where, as in all figures of B from Cod. Tro-Cort., the line of the jaw extends across the base of this oral object (see Brasseur, '80). By the omission of this line in the copy the object is thus made to resemble a "tooth" more than it does in the original. The true teeth of B in Cod. Tro-Cort. are regular and prominent, and the backward curving body at the side of the mouth may or may not be a "tooth." Until, however, it can be shown that this lateral body is a "tooth," the reference of B to Cogolludo's god with teeth "muy desformis" is doubtful, so far as this object is concerned.

‡ From the fact that it was customary in Central America, as in many other places, for divinities to be personified in ceremonials by men wearing grotesque masks with the symbolism of those divinities, it is possible to speak without valid objections of the heads of these divinities depicted in the codices as ceremonial masks or representations of the same. The terms "masks" and "ceremonial helmets" are significant words to use in this connection, against which nothing of value has yet been urged. The use of masks in certain Mayan dances still survives, and according to Valentini ('95) the tapir mask is still employed in a "ballet" of the "Zayi" dance. This latter fact, as mentioned by this author in connection with a cephaloglyph of B, is interesting, as the nose of B has been compared to the snout of the tapir by several authors.

The following features are common to all the figures of D in the Cod. Cort. :

1. Nose prominent, not hanging below the lower lip, pointed, not continuous with an upper lip, but separated from it by a notch ; \* end of nose not curving upward.
2. Eye bounded by a scroll with marginal blocks.
3. Upper jaw toothless ; single tooth in lower jaw.
4. No curved oral object at the corner of the mouth.
5. No scroll over the nose.
6. Headdress present but variable.

The following table gives suggestive associations of D :

Associated with the symbol kan (maize).....	11
<i>kan</i> in the hand.....	4
<i>kan inix</i> in the hand.....	3
<i>kan</i> on ground before him.....	2
seated on <i>kan</i> . ....	1
Associated with <i>it</i> . ....	1
Associated with <i>kin</i> †.....	2
Associated with <i>akbal</i> .....	‡
Associated with <i>ahau</i> .....	‡
Associated with snake....	3
Associated with falling water.....	1

In an analysis of this table we are struck by the large number of figures of D associated with the sign *kan*, maize.|| D is, we should judge from associations, a beneficent, not a malevolent, god connected with life, and the association of the snake with D and the existence of the *kin* sign on the head and at the feet suggest the sun. A figure of D is found once at least in the

\* This notch is absent in all figures of B in Cod. Cort. Attention is called to the fact that the sign *akbal* is wanting on the head of D in Cod. Cort. In figures of D in Cod. Dres. it is sometimes present, as shown by Schellhas.

† In one instance on the head, in another on the ground before him. In some of the cephaloglyphs of D is a half circle which resembles a conventional sign of the sun.

‡ The existence of *akbal* on the forehead of the cephaloglyph of D will be discussed later. This sign occurs in the hieroglyphs of D in Cod. Cort., but not on the figures themselves.

§ Although associated with D in other codices, I find it with this god in Cod. Cort. only in one or two doubtful cases.

|| Many English equivalents of *kan* have been pointed out, but there is a singularly uniform acceptance of the belief that one of these is corn or maize. Some of the derivative meanings are not difficult to explain, as, for instance, "wealth" (abundance), etc., on the ground that *kan*, yellow, or corn is a primary translation. The Tusayan Indians use in the same way the word *ka-e*, maize, which has a startling phonetic resemblance to *kan*.

neighborhood of the hieroglyph for west, and once near that of east. He is frequently seated in a house marked with a cross.

The hieroglyph \* ascribed by Schellhas ('86, p. 57) to G occurs, in Cod. Cort., over D on page xxix a 1. The cephaloglyph of D occurs over D in xvi a 1, † xxi c 1 (xxi d 3 without *akbal*, but with dots), xxx b 1 (?), xxvi c 2, xxviii b 1. It is found over another god in xxxiii b 2 and xxix, xx c 1. Modifications of the cephaloglyph of D with *akbal* surrounded by dots occur over animals or gods not identified as D in xxx a 1, xxix c 1.

### *Identifications of D.*

It is natural that a pictorial element which forms such a constant and extensive element in the illustrations of the codices should be thought to represent an important deity, and it is not strange that D is identified with one of the most important of the deities mentioned by Spanish writers. Three identifications have more or less in their favor, viz., Itzamná, Moon god, and Kukulcan, and it is believed the evidence is good that it belongs to one or another of these three.

One of the first steps taken to identify D was by Schellhas ('86), who in his earliest publication pointed out some of the main features of symbolism, but assigned no definite name beyond the letter "D" and "God with the face of an old man." Later, however, he became convinced that it is a "Moon god." From Schellhas' first description ('86, p. 57) I quote as follows: "Geschicht eines alten Mannes mit eingefallenen, Zehnlosem Munde, verziertem Auge wie die Gott mit der Schlangenzunge" "vor den Gesicht herabhängenden Koppsmück der das Tageszeichen *akbal* ‡ enthält."

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\* The form of this hieroglyph given by Schellhas ('92, p. 104, first figure of D) does not occur with D in Cod. Cort., so far as I can find.

† Unfortunately the pages of the Rada y Delgado facsimile of the Cod. Cort. are not numbered, so that for uniformity with the enumeration of the pages of Cod. Dres. I have used Roman numerals, adopting the pagination of Rosny's copy. While, however, there was no other course to follow in referring to the Cod. Cort., I believe, as it and Cod. Tro. are undoubtedly fragments of one large codex, that a simpler paging of the Cod. Tro-Cort., taken together, is called for and must be devised to insure convenience of references as research progresses.

‡ This feature must have been overlooked by Brinton when he identified a figure of D with the *akbal* on the head as Kin ich ('95, fig. 74). The proper identification of the middle figure of fig. 74 (op. cit.) is not Kin ich, but the god D, if we limit Kin ich as Schellhas and Brinton have in their articles.

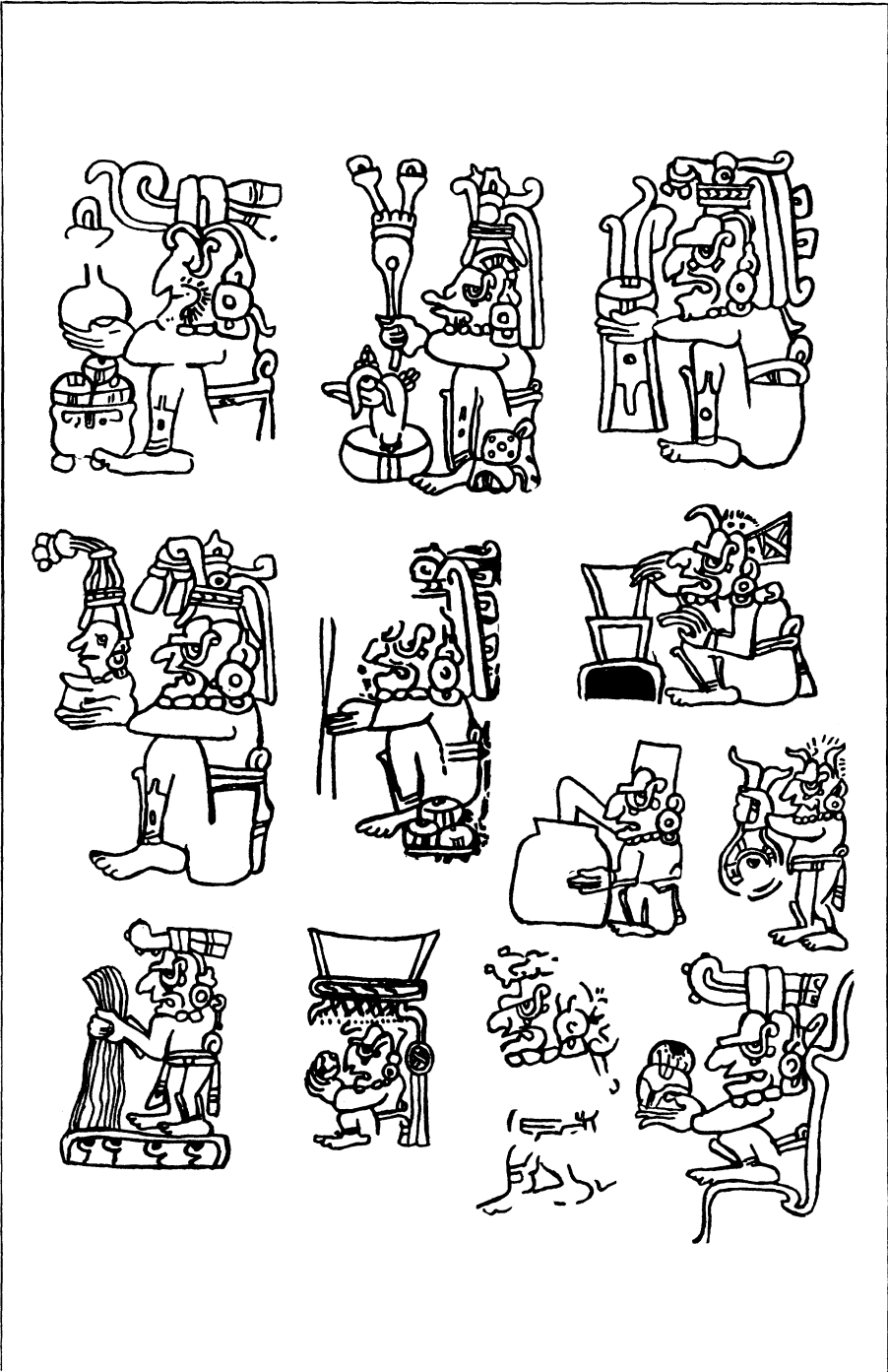


PLATE I.—The God "D," after Codex Cortesianus

In later publications ('87, p. 19; '92, pp. 110-111) the same author said of D that it "ist unzweifelhaft den Mondgott," which is the first of the identifications that I shall discuss. In following his argument stress is laid on the presence of *akbal* surrounded by dots, especially in the hieroglyph which is ascribed to D. In the figures of D in Cod. Cort. I have never found the sign *akbal* hanging down before the face as in figures of D in Codex Dresdensis.\*

Granting, as we may with reasonable faith, that the hieroglyph of D is rightly assigned, it is well to attempt an interpretation of the component *akbal*† as a significant factor in the identification of D. The word *akbal* signifies darkness or night, and, according to Seler ('89, p. 58), the Mayas still use *akab*, *akabil*, and *akbil* to designate night. Others, as Kiche-Cakchiquel, use *a'kab*, *a'ka*, *a'kbal* for the same, and the Ixil *akbal*, according to the same authority. The Nahuatl equivalent, *calli*, means "house," which I may anticipate by saying it may refer simply to the sun-house or place where the sun sets, which, as the Nahuas associate with the west, refers to the western house, or place of sunset.

The Tzendal equivalent is Votan, which, according to Seler ('89, p. 57), is not the proper name of the sign, but that of a Cultus hero, the celebrated Votan, to whom the sign is consecrated. If we follow him in his derivation of *votan* and find the etymologic meaning to be "Heart of expansion" or "Heart of the surface," it is possible that the root *tan*, "expansion," may refer to the sky, and the heart to the sun, possibly the same as the Kiche *uc'uxcah*, the heart of the sky, of the Popol Vuh.

The presence of *akbal* on the cephaloglyph ‡ of the Bat god (Seler, '94) and in the name of the Bat month (Landa, '81) adds little one way or the other to the interpretation of D as a Moon god, but conveys the same idea of darkness as in the cephaloglyph of D. The association of the Bat god with the under

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\* In figures of D the lower jaw is furnished with one tooth and is not toothless in Cod. Tro-Cort.

† This is not limited to the cephaloglyph of D.

‡ The term cephaloglyph is applied to those hieroglyphs which are simply conventionalized pictures of heads, either of gods or animals, and are readily distinguished from day signs (hemeroglyphs), numerical signs (metroglyphs), and others. The hieroglyphs of the different gods often contain as an important component the cephaloglyph of that god, as B, C, etc.

world as a subterranean cavern is in harmony with the idea of the solar interpretation of D, for the sun in setting sinks into the under world in the conceptions of many American tribes.

Manifestly, if the etymologic analysis given above is correct, or approximately so, we find naught in *akbal*, except the meaning "to become dark," to suggest the moon, and this can be explained on the supposition that *akbal* refers to the sun of the under world or the sun sinking into his western house, *calli*, followed, as suggested by Seler, by the Cihuateteô, daughters of the Earth goddess, into whose home the sun goes.

An examination of other arguments presented by Schellhas that D is a Moon god has not carried conviction. The association with the snail in the light of the relationship of this animal to the winter solstice recalls not a Moon god, but rather a Sun god. This author says ('87, p. 19): "Dass die in sorgfältig ausgeführten Varianten der Hieroglyphe des Gottes (wie die oben abgebildete) unterhalb des Mondgesichtes befindliche bogenförmige Figur den Mond in seinem Viertel darstellen soll. Es spricht dafür noch die interessante Thatsache, dass in Landa's Alphabet eine ganz ähnliche mondviertel förmige Figur gegeben ist, mit dem phonetischen Werthe U. U heist der Mond in Maya." In an examination of this argument we must bear in mind that Landa gives two signs for *U*, one of which, to be sure, might be called a crescent (a moon symbol), but the other is a simple spiral, recalling the coil in *caban*. Surely the crescent sign for the letter *u* is not always a prominent element of the hieroglyph assigned to D.

Schellhas ('92, p. 110) points out that there is "einer unbekannten Beziehung" between D and a "Water goddess, I," who has a serpent headdress. I think we may accept the belief that a goddess with a serpent headdress is a serpent being or in some way related to such a one. The association of D and I is not obscure if D be regarded a Sun god, as sun and serpent symbolism are almost inseparable in American mythologies. On the theory that D is a Moon god, it is difficult to explain the anomalous association with a goddess bearing the serpent.\*

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\* One figure of D in Cort. Cod. carries in the hand a serpent object (aspergil? or rattle?), and there are in the other codices other instances of serpent symbols associated with D.



Dieseldorff has added an important bit of evidence to the theory that D is a Moon god in his remarks on the decoration of a jar from Coban.

After pointing out the presence of the snail (which, I believe, does not militate against, but rather supports, the claim that D is a solar god), he says ('93, p. 380): "Das Zeichen Akbal, welches Nacht bedeutet, wird bei dem Stirnschmuck durch die Mondsichel ersetzt, von welcher Büschel niederfallen, in denen ich vermüthe, dass Regen dargestellt sein soll (vergl. Dresd. 74); auch sitzt der Gott an einem Wasserlauf." The figure referred to as attached to the forehead is certainly crescentic in form, and therefore not unlike a moon, and there is a likeness between the water falling from the dragon's head of the celestial tablet in Dres. 74, and, we might add, from the rain-clouds below it, and the "büschel" which fall from the crescentic figure of the forehead of the decoration of the Coban jar. Notwithstanding, however, these coincidences, all can be explained on the theory that D is a solar god, except the crescentic body. Supposing that the crescent in this figure has the same position as *akbal* in figures of D in Cod. Dres., we may compare the "büschel" with the appendages to *akbal* in those figures of D in Cod. Dres. which had this sign above the head. In such figures, of which there are several, there is little resemblance between the appendage and water; so that there may be a doubt whether the "Büscheln" of the Coban jar really represent water, as supposed by Dieseldorff.

If, moreover, the symbol *akbal*, night or darkness (to become dark), refers to the moon, there still remains to be interpreted that example of D which has the *kin* (sun) sign on the forehead and those like Cod. Dres. xv c, which carry *kin* (sun) in the hand, which are readily explained on the theory which follows, that D is a solar deity.

The reasons, which appear to me to be valid, for the identification of D as Itzamná have been exhaustively stated by Seler; but while I have no new evidence, it seems to me that a few additional facts available add some weight to the conclusion that it is a Sun god of the hieroglyph *akbal* surrounded by dots. He says ('89, p. 64): "La figure 366 [*akbal*], le symbole du dieu Itzamná, me paraît indiquer la lumière qui descend de l'obscurité de la nuit, le ciel étoilé." On the supposition that D is a solar deity, I should regard it as well symbolized by *akbal*, the

dark sun (under world sun) surrounded by the dots representing sunrise or sunset rays.\*

Seler's studies of the Maya calendar have yielded important results in regard to the meaning of *ahau*, which are highly instructive, considering the association of the god D with the sign for east. *Ahau* signifies "king," "master," according to this authority, and "in this acceptation is employed not only in the Maya of Yucatan, but also in the different languages of Guatemala." He derives it from the masculine prefix *ah* (prefix denoting possession). "La signification fondamentale de *ahau* est, en tous cas, homme, maître; les deux racines *ah* et *vu*, qui ont la même signification, paraissent concourir à la formation de ce mot (Seler, '89, p. 110)."

The meanings of *ahau* given by Brasseur ('70, p. 132) are "Sieigneur, prince, roi, souverain." According to Seler, this author translated it "maître du collier," master of the collar.†

One "master," "king," or "sovereign" sometimes referred to by *ahau* is undoubtedly the sun, and the interpretation of the Kiche myth of Hunahpu and Xbalanque by Seler is highly instructive in this connection. Comparative studies also indicate the same, and Seler finds that Hunahpu "répond au mexicain *ce xochill* qu'on rencontre dans le Cod. de Vienne 23, comme symbole certain du dieu du soleil, ou, plutôt, comme le nom même du dieu du soleil. Le soleil étant le roi des dieux, *ehau* et *hunah pu* s'accordent parfaitement avec le mexicain *xochill*." In view of the application of the hieroglyph *ahau* to the sun, the reader's attention is called to the conventional Tusayan sun symbol as figured in my account of the Palülükonti. The upper segment of the disk of *Tawa* (Sun) is separated from the lower by a horizontal line, from the middle of which arises a vertical which divides the segment into two parts, comparable with some variants of *ahau*. (Seler, '89, p. 111, figs. 848-851, 871-873.)

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\* No one in discussing the theory that D is a Moon god seems to have called attention to the paucity of references to a Moon god in Spanish or semi-Spanish accounts of Maya or Kiche mythology. In D we have a god pictured almost as many times as the most numerous A or B. If it is a Moon god, is it not strange that it is so seldom referred to in Spanish writings? Brinton ('95, pp. 37-45), in his account of the Maya mythology, does not mention a Moon god, justly, I believe, on account of its insignificance in the Maya Olympus, and we look in Popol Vuh (Brasseur, '61, pp. 5, 7, etc.) in vain for a Moon god among the powerful deities. Does not this fact convey a word of caution to the observer against assigning to the Moon god the figures of D, which are among the most numerous in the codices?

† A god with an *ahau* on the head and collar on the neck is referred to later.



PLATE II.—The God "D," after Codex Cortesianus

As shown by several authors, as, for instance, Thomas ('93, p. 248), the upper part of the sign for east is probably *ahau*. If the word for east (*likin*) is expressed by *ahau kin* (master sun), the figure of D below it is not explained by the hypothesis that D is the setting sun, provided, of course, this symbol is rightly assigned to the east, as I believe it is. But evidence drawn from the argument that D is in the west world-quarter in the Tableau is offset by that drawn from the existence of D in the opposite, or east, world-quarter in the same Tableau. Evidently little light on the question of whether D is a setting sun can be derived from the position of D in the Tableau, so far as the element *ahau* in the east world-quarter sign is concerned. Furthermore, if the bound figure in the south world-quarter is the same as the right-hand upper figure of Cod. Cort. xix *b*, who has an *ahau* on the head, new complications arise; for if it is to be interpreted the moon on the forehead of the sign of D, why not likewise call it a moon sign on this figure? This question, of course, might also be asked: If *ahau* is regarded as a sun sign, why is not the yellow figure with the high collar and *ahau* sign a sun god? *Ahau* is a common prefix or suffix for many and diverse gods and exists in their names, "Cum Ahau," "Lord of the Vase" (probably Itzamná—Brinton, '95, p. 42), Hunahpu, Ahraxahak, Ahraxa Trel (Brasseur, '61), etc., and does not in all instances refer to a sun god.

*Ahau* is said (Seler, '89, p. 113) to form an important component in hieroglyphs referring to gods of light,\* life, and prosperity, but is completely absent in those of hostile powers, the divinities of death. It is natural to refer such to solar rather than to lunar deities (which are more often sinister and dark in nature), gods of the under world, death, and hostile powers.

Seler ('89, p. 57) states his views that D represents Itzamná so clearly in his interpretation of some of the sitting figures in the Tableau des Bacabs that I will quote him at length: "Sur la fameuse feuille 41-42 du Codex Cortez que Cyrus Thomas a discutée dans sa récente publication, nous voyons au milieu des quatre points cardinaux, deux divinités assises sous un arbre (le *yax ché* le ceiba?); nous avons certainement reconnu l'ancien dieu, Itzamná, le dieu père, d'après Hernandez, et sa com-

\* By comparative studies of the other codices I find that there is good ground for the belief that the sign *ahau* is associated with D in several instances.

pagne (Ixchel, la mère de Chibiriac, la mère de Bacab). Les mêmes divinités se trouvent en haut de l'image, parmi les signes du ciel qui, d'après l'hypothèse habituelle, désignent l'orient, mais peut-être la direction du sud. Au milieu de la figure, le dieu tient une pile de trois signes *ik* (fig. 253) ; devant la divinité se trouve une autre pile (fig. 254) qui montre, en dessous, le symbole du vase, en dessus le signe *ik*, et enfin une figure d'animal peinte en rouge\* qui fait penser au signe *imix*, le symbole de la fécondité."

A third identification of D is by Brinton ('95, p. 56), who differs from all others in referring it to Kukulcan. He mentions the several characteristics of D, and regards them as "traits coinciding" with the myths of Kukulcan. I regret that he has not discussed the different interpretation of the same characteristics by Seler and Schellhas, and, as I find no distinctive feature among those mentioned to prove that D is Kukulcan, his argumentation does not appear to me conclusive, or is at most incomplete.†

Schellhas has shown ('86, p. 58) that the god D has an appendage to the chin comparable with a beard, and claims that it is absent in all other figures: "Er (beard) kommt bei keiner anderere Figur der Handschriften vor." Notwithstanding this feature is not universal in figures of D, indeed occurs in but one figure of D in Cod. Cort., Brinton ('95, pp. 56, 57) gives it weight in an attempt to identify D as Kukulcan, and says: "When we perceive that he, and he alone of all the deities, is occasionally depicted *with a beard under his chin*, just as Cuculcan wore in the legend, the identification becomes complete."

We find a figure of the head of D emerging from a "green dragon" in one page of Cod. Dres., and this fact has been adduced in evidence that D is Kukulcan. It is said in Popol Vuh (p. 315) of Gucumatz, the Kiche equivalent of Kukulcan, that every seven days he took on the nature of a snake and was veri-

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\* In my copy of the Rada y Delgado facsimile of the Codex Cortez the part of the pile of three signs mentioned as a figure of an animal is not *peints en rouge* and is of the same color as the other two.

† This author says that D generally bears the sign *akbal* "because he is the setting or night sun; for which reason his headdress is often the horns of the eared owl." I readily subscribe to the view that D is a Sun god, possibly in cases where he has *akbal*, the darkened sun, but know not the evidence that the horn sometimes represented on the heads of this and other deities is the horn of the "eared owl," and reserve an expression of opinion on that point.

tably a snake, and it is natural to use a figure with a serpent body in support of the theory that it represents Kukulcan. The force of the argument is, however, that D is Kukulcan is somewhat diminished when we remember that in two instances in Cod. Cort. a figure of a snake bears the head, not of D but of B, and the reptile figured with D in Cod. Dres. differs from a snake in having legs.

While Brinton finds that Itzamná is generally connected with Yaxche, "The Tree of Life," which he, as Seler, believes to be represented in the middle of the Tableau des Bacabs, he identifies the god under it in this instance as Kukulcan, and does not refer to Seler's strong argument from this very association that it is Itzamná. So far as I can follow the evidences brought forward to identify D as Kukulcan, they do not seem to me to overthrow those of Seler that D is Itzamná.

The exact relationship between the text and the accompanying pictorial elements or components of the codices are more or less indefinitely known, and it is commonly supposed that there is a connection between the two. In some instances, however, I think I can show that this connection is distant. Let me illustrate by a figure (Cod. Cort. xxxix b 2) which I have identified as D. Saville ('94) has shown that pls. xxxi-xxxviii plus the lower half of xxxix (Cod. Cort.) is a tonalamatl. This tonalamatl consists of eight full pages divided in the middle of a horizontal red band. In the upper half there are sixteen figures, and in the lower the same number, making thirty-two figures in all in these eight pages. Over each of the thirty-two figures there are six hieroglyphs, of which that in the lower right-hand corner is the *same* in *all* the thirty-two clusters. Whatever this series of thirty-two groups of six glyphs means, each group closes with the same sign, verb, substantive, or what not.

Taking now a fresh start and looking at the lower series of sixteen groups, of six hieroglyphs each, we find that the seventh and eighth groups (xxxiv b, Cod. Cort.), counting xxxi b as the first, have all the six hieroglyphs (cephaloglyphs and other components) identical with the sixteenth. In other words, a lesser series of eight closes with the same six glyphs, followed by a different series of eight, likewise closing with the same six signs. In this repetition we may have a coincidence, but it is interesting that it is connected with the number eight. From a point of view of comparative ceremoniology, this continual and rhythmic

repetition suggests songs, incantations, invocations, or prayers rather than histories or accounts of rituals.\*

Again, the figure of D drawn below the eighth group of the lower series (xxxiv b 2) of the tonalamatl has, as shown above, the same six glyphs above it as a Black god (op. cit. 1) and a figure of the turtle in the sixteenth group (xxxvii b 2). Evidently, therefore, the text embraced in the six glyphs of each of these three is not illustrated by the same pictorial component. None of the three sets of six identical hieroglyphs contains the cephaloglyph ordinarily ascribed to D or that of the Turtle, although the glyph for earth is present in all and the cephaloglyph of B and one other is universal. Recognizing an absence of knowledge of what the whole series means, we are not denied the statement that there is a want of harmony between the text of the lower parts of plates xxxiv and the second part of plate xxxviii and the accompanying pictorial elements. I venture the suggestion that the series of thirty-two groups of glyphs referred to as a recitative invocation or prognostic and the predominance of the cephaloglyphs of solar deities implies that it pertains to these deities. The character of the pictorial elements does not prevent an acceptance of this theory or one of a related nature.

### *Similarity in Symbolism to God G.*

Both B and D have masks which are similar to that of G,† which is generally recognized from the presence of the sign *kin* on head, arms, and thighs, and in the hieroglyph as a Sun god.

As Schellhas has pointed out, there is no figure in Cod. Cort. which corresponds with god G as described by him. It would therefore naturally not be considered in this article, but from the fact that symbolically it can only with difficulty be separated from B or D, the one feature, the sign *kin* mentioned as distin-

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\* It is a suggestive fact in this connection that the glyph *pax*, which Brasseur translated as a musical instrument and Brinton identifies as a drum, occurs many times in the series, in most instances just before the final glyph common to all, never, so far as can be seen, as an initial sign in the series.

† It is evident that there is such a close likeness between G (Kin ich ahau) and Itzamná that it amounts to an identity, and Landa speaks at least twice (pp. 89, 97) of a ceremonial idol which was called Cinchahan Yzamná or Chinchán Yzamná. Here is a reason for a belief that Kin ich ahau is so closely allied to Itzamná that Spanish accounts confuse them. The symbolism of B, D, and G as expressed in the codices is so close that I doubt whether we are justified in separating G from the other two, and the evidence that G is a midday sun, while B and D are sunrise and sunset attributable names, is not wholly satisfactory.

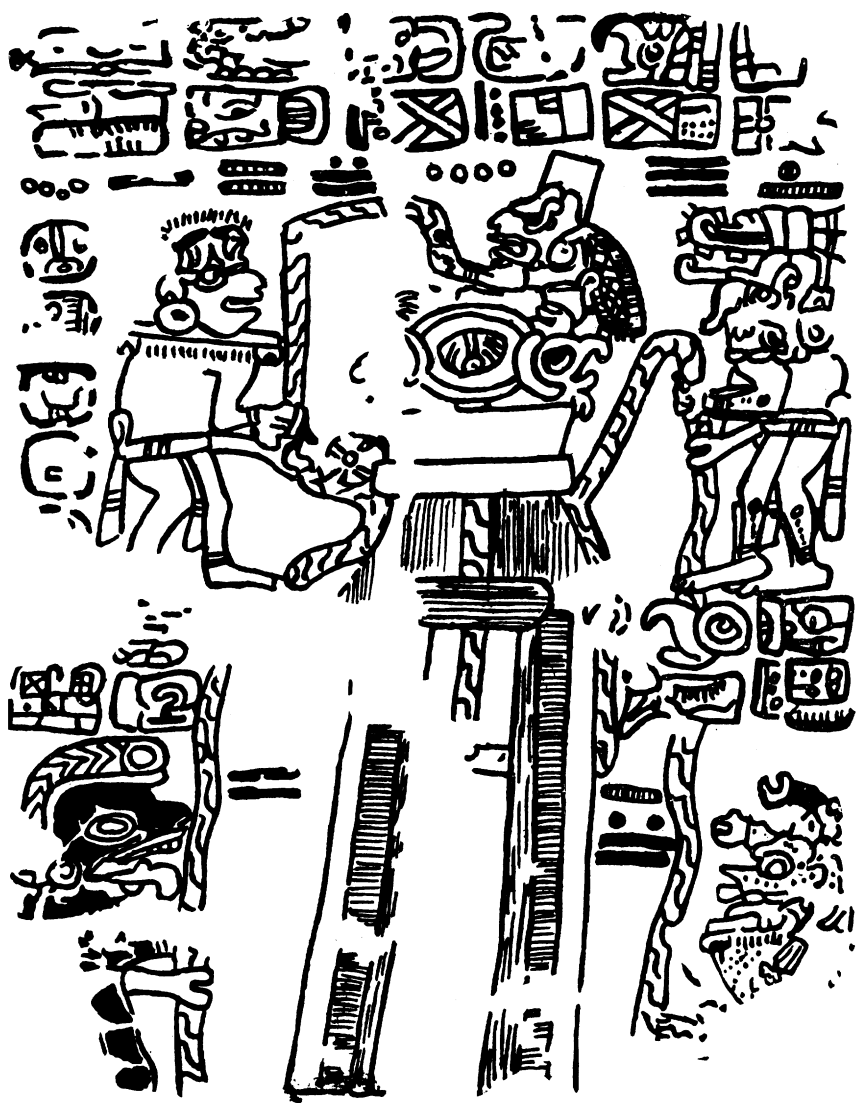


PLATE III.—Summer Solstice, after Codex Cortesianus



guishing it, being insufficient. As this is said to be one of the easiest gods to identify, and as the above statement is a departure from the interpretation of Schellhas, an examination of figures of G in other codices is called for in evidence of the validity of my conclusion ('92, p. 113.)

Schellhas' diagnosis of G is as follows: "Charakterisch für seine Darstellungen ist ausser dem sonnenzeichen *kin*, das er auf Körper trägt, eine eigenthümliche Nasenverzierung (fig. 43) die wie man aus einem Vergleich mit anderen ähnlichen Darstellungen im Dr. Sieht nichts anderes ist, als ein grosser und besonders kuntvolles Nasenflock." It would seem that the one essential characteristic of G is the sun (*kin*) symbol on the body, arms, or head, or in a hieroglyph which is associated with G.

According to Schellhas ('86, p. 62), there is one characteristic of G which never fails, viz., "die gebogene Verzierung auf der Nase," an appendage easily recognized from a figure of it which he has given in another article ('92). As this appendage or any well identified figure of G is not found in Cod. Tro-Cort., let us turn to Cod. Dres. for figures with this appendage. We find it well marked in XI *b* 1, XI *c* 2, XV *a* 1, XXII *b* 3, all of which have the sign *kin* on back, thighs, arms, or head, and all have the curved "tongue" in the angle of the mouth like B. The homology of the curved nasal appendage is shown in XIII *a* 1, where we find it comparable with the body above the nose in B. In looking over the 130 figures of B in Cod. Dres. I find twenty-five, more or less, decorated with what might be called *kin* signs on body, thighs, arms, or head, not half of which have the nasal body in the form said to be characteristic of G, while many do not have the hieroglyph referred to the same god.

A result of my examination of G in Cod. Dres. has therefore convinced me that, instead of being the "easiest of all to identify," it is one of the most difficult, and I have been led to doubt whether the so-called differences in symbolism between G and B are important enough to always separate them. The theory that G represents the "Mid-day Sun," while possible, has certainly not been shown to be so beyond doubt by the evidence presented.\*

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\* According to Schellhas ('92, p. 113), in no other codex except Cod. Dres. is there found a figure of a god (except G) which has the sun sign (*kin*) on the body, but in Cod. Cort. there is a figure of D with *kin* on the head, as I have shown in this article.

The diversity of opinion in regard to the proper identifications of B and D as Kukulcan and Itzamná or vice versa, whichever may be right, still allow us to consider both solar deities, as indicated by the contents of the codices.

Some of the evidences which may be mentioned indicating the solar nature of B, D, and G are—

1. Association with the signs *kin* and *ahau* (except B).
2. Association with all cardinal points (D generally with west).
3. Association with snake (plumed) and falling water.
4. Association with or engaged in beneficent acts, planting, pouring water or *kan* (maize field, corn, etc.).
5. Torches in one or both hands.\*

The lower half of plate XIX (Cod. Cort.) is instructive to study as a whole in connection with the theory that B and D are solar deities, as they and the other deities in the series forming the tonalamatl † (pl. x, XXXI-XXXIX) figure in it. An explanation of this picture as a whole may be as follows:

In the middle we find a house represented, perhaps a sun-house (earth, under world). Meandering on each side of this house and entering it, or passing behind it, is a cord (serpent?), the symbol of the path of the sun. The Maya artist placed on this path the symbol *kin* (sun) as if to show what he meant, and to it joined by a kind of umbilical attachment four gods (B, A, the Black god, and a god with an enormous collar and *ahau* on the head), thus indicating how intimately these gods were connected with the sun. At the point where the pathway (cord) enters or leaves the house is the Turtle, ‡ emblem of the sun-

\* I do not regard it necessary to draw from comparative mythology facts in support of the worship of several suns (see Spencer's Synthetic Philosophy, I, p. 377), nor do I feel called upon to account for the "cultus hero" element of Kukulcan except to say that it would be perfectly natural for primitive man, as has happened again and again independently, to ascribe the beneficent attributes of one luminary or even his name to a religious reformer, teacher, or great leader.

† Although the enumeration of the four rows of day signs on pp. xxxi-xxxix is not the tonalamatl (260 days), possibly such was intended by the writer.

‡ In a later publication on the Death god, A, the following resemblances between it and the Turtle as a symbol of the solstices will be discussed:

1. The globular bodies ("eyes," "bells," etc.) on the heads.
2. The zigzag lines ("spear-point") crossing each other on the head of A and the carapace of the turtle.
3. The bands on the body.
4. Short, stumpy tail of some pictures of A.
5. Shape of eyes of A and those of the Turtle.

mer solstice (Förstemann, 392 *a*), with the *yax* sign to denote the sun's force at that point. The god D, like the other four, grasps the cord (the umbilical attachment not visible).

The two lower gods are A, Death god, and the Black god (Ekchuah?), both gods of the under world. Two of the three of the upper half we know as B, Kukulcan; D, Itzamná. But what of the third? Glancing at the Tableau des Bacabs, we see in the world-quarter with the symbol for south a similar personage bound and seated, but with no sign of *ahau* on the head, although a halo is not wanting. Here also, if we consider the Death god as north, this god is south, diagonally opposite the north. Considering that the four gods united to the cord are four world-quarter gods, beginning at A and following a sinistral circuit, we would have A, Death god (north); B, Kukulcan (east); "Bearer of the collar" (south), and Black god (west); or, if we regard B as god of a fifth direction and include D in the circuit, we would have N., W., S., E., and B (middle, above). This lower half of plate xix (Cort. Cod.) closes a tonalamatl, of which it is the eighth (significant) page, the preceding bearing the four rows of day-signs which constitute that epoch. Every page of the section of eight, of which it is the last except itself, has falling rain depicted on it. There are six snakes on the seven preceding pages, so arranged that every page has the head or part of the body of one of these reptiles. We are, so far as can be judged from pictorial components of these pages, dealing with a rain occurrence of some kind, in which Kukulcan, the plumed serpent, and falling water figure conspicuously. Let us suppose that the lower part of page xix represents the summer solstice or the Turtle month, *Kaiab*, whose cephaloglyph has a turtle's head in composition (see Landa). If the preceding seven pages refer to a ceremony, to what one, using Landa's calendar, shall we look? According to Landa, in the month of *Pax* was celebrated the *Pacumchac*, in which the rites of Kukulcan performed in November were repeated. In this month (May) the rains in Yucatan begin. The plumed snakes spread over pages xii-xviii, the figures of B Kukulcan, the falling water on every one of the seven pages, the culmination of the eighth page in a picture with a turtle and the sun's course, as I have theoretically interpreted page xix, may not refer to ceremonials described by Landa at the summer solstice and the month be-

fore it, but there are many circumstantial coincidences between them, connected, doubtless, with cycles of time and movements of heavenly bodies.

If, however, the seven pages refer to astrologic or astronomic events, as the character of plate XIX would imply, we may have represented simply the position of certain celestial bodies, evidently prominently the sun, whose symbol is so constant.\* But if the symbols in the Celestial Band are rightly assigned to planets by Förstemann, possibly this series deals with the planets Venus, the moon, and possibly others. The astronomical explanation rather than the ritualistic appeals to me when I study the symbols, but the association of ceremony and position of the sun, planets, stars, etc., was so close that the ritualistic element is not absent from these plates.

The so-called Tableau des Bacab, which relates to a ritual period of 260 days, as indicated by the day-signs and accompanying dots, has three figures of D, one of which is seated under a *yak-che* or tree of life in the center, one seated in the eastern, and one in the western world-quarter. The one in the eastern house† faces a female or Earth goddess, before whom is a symbol of *kan* (field of maize), upon which falls either the lightning (the fertilizer?) or the fierce rays of the sun.

In conclusion, I would state that some of the results of my studies of the three gods B, D, and G are—

1. They represent solar deities referable to those described by Spanish writers as Kukulcan, Itzamná, and Kin ich ahau, or the latter combined.

2. The symbolism is very similar and characteristic, differing considerably from that of other gods, and indicating close relationship in the supernatural person depicted.

3. While evidence is good that B may be identified as Kukulcan and D as Itzamná, it falls short of proof of this or of the reverse theory. The argument that D is one of these personages is stronger than that it is a Moon god pure and simple.

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\* Brinton has already pointed out that the upper series of xiv, xv, xvi "may represent positions of certain celestial bodies before the summer solstice (indicated by the turtle, p. 7)," but I regard the summer solstice as pictured in p. xixb for the lower series.

† The cross on the upright of these houses, which occurs so frequently in the codex, may refer to the sun or the sun-house (see Seler, '89, p. 58, where the cross is spoken of in the figs. 256-258). It is an interesting fact that a similar cross, as I have elsewhere shown, among the Tusayan Indians is a symbol of *Cotokmuñwa*, the Heart of All the Sky. In the discussion of *akbal* by Seler it seems that a cross has relation to the heart of expansion in Mayan mythology.



PLATE IV.—After Codex Cortesianus

4. The lower part of page xix (Cod. Cort.) is an example of picture-writing representing the summer solstice and the course of the sun with world quarter gods.

Spanish accounts of the peculiarities of Kukulcan and Itzamná are so vague and the differences indicated so doubtful that little information is added to our knowledge by affixing one of these names to B in preference to D, or vice versa ; but the recognition of B, D, and G as solar deities, if supported by the good authority of facts, is a step forward in the interpretation of the pictorial elements of the codices.

I have introduced on the fourth plate seven pictures of an Earth goddess associated with the god D in several cases. The proper identification of this personage is as yet doubtful, but I incline to Seler's view that they represent Ixchel. In those instances which are intimately associated with D, as in *Tableau des Bacab*, it would seem that here we have one form of the Earth mother, as, in a way, the Sun god D is the father ; but this view may be subject to modification on more extended studies.

This goddess is identified by Brinton as the "Evening Star in her epiphany as Mother Earth, source of life, ancestress of the race." He calls her ('95, p. 63) by her Kiche name, Xmucane, drawing *evidence from analogy of the Kiche mythology* of Popol Vuh and that of the writers of the codices. The two figures in the middle of the *Tableau des Bacabs* he identifies as "Cuculkan" and Xmucane, and considers the latter (op. cit., p. 64) the "female counterpart of Cuculkan" or "consort" of the same. These two he calls (p. 49) "our first parents"—evidently male and female. He states that Gukumatz, however, "is positively said to be the bisexual principle of life represented by the male Xpiyacoc, and the female Xmucane, ancestor and ancestress of all that is." I find it difficult to harmonize these two statements if Gukumatz and Kukulcan are the same or like conceptions, as I think they are.

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